

AMENDMENT TO THE SPECIFICATION

Please amend the paragraphs beginning on page 2, line 20 through page 4, line 4 as follows:

According to an exemplary embodiment of the present invention ~~as set forth in claim 2~~, the communication network is a packet transmission or switching network in accordance with the IEEE 802.11 standard. The IEEE 802.11 standard (IEEE 801.11, 1999 edition (ISO/IIC 8802-11: 1999) IEEE standards for information technology-telecommunications and information exchange between systems) is hereby incorporated by reference.

According to another exemplary embodiment of the present invention ~~as set forth in claim 3~~, the bridge terminal is switched periodically between the first and second subnets and jitters in a pre-determined duration of absence in the subnets are compensated over a plurality of switching cycles by respectively controlling the switching.

Advantageously, this exemplary embodiment of the present invention may ensure that the presence time of the bridge terminal is equal for both subnets. Advantageously, this avoids delays in the data transmission.

According to another exemplary embodiment of the present invention ~~as set forth in claim 4~~, a content of missed beacon signals is reported by the bridge terminal by means of a probe/probe signaling. Advantageously, this allows for a very secure data transmission.

Another exemplary embodiment of the present invention ~~as set forth in claim 5~~ provides for a bridge terminal for connecting the first and second subnets, where the unavailability of the bridge terminal in the first and second subnets, i.e. the absence and presence time in the respective one of the first and second subnets is signaled within the respective subnets by means of a power saving signal of the communication network. Advantageously, according to this exemplary embodiment of the present invention, a simple connection between subnets of a communication network is provided, where an already existing signal structure, namely the signals relating to a power saving mode are used for signaling the absence time and the presence time of the bridge circuit in the respective subnet.

~~Claims 6, 7 and 8 provide for further~~ Further exemplary embodiments of the bridge terminal according to the present invention, ~~which~~ may allow for an improved data transmission rate between the subnets, while requiring no further signaling structure for informing other terminals in the first and second subnets about the absence time and the presence time of the bridge terminal.

~~Claims 9 and 10 provide for~~ Additional exemplary embodiments of communication networks according to the present invention, ~~allowing~~ allow for a simple network architecture, which can be set up with low effort and at low cost.

The present invention also relates to a computer program for operating a bridge terminal of a communication network for connecting a first subnet and a second subnet, wherein the first subnet operates on a first frequency channel and the second subnet operates on a second frequency channel. ~~The computer program according to the present invention is further defined in claim 11.~~ The computer program according to the present invention is preferably loaded into a working memory of a data processor in the bridge circuit. The data processor in the bridge circuit is thus equipped to carry out the method of the invention. The computer program may be stored on a computer readable medium, such as a CD-Rom. The computer program may also be presented over a network, such as the WorldWideWeb and can be downloaded into the working memory of a data processor from such a network.

Please amend the paragraph beginning at page 7, line 17 as follows:

A further reason for the extension of the absence time of the bridge terminal in one of the subnets is the internal transmission between stations and ~~collusions~~ collisions between absence time signaling messages. The jitter of the switching strongly depends on the traffic to be transmitted between the subnets.

Please amend the consecutive paragraphs from page 8, line 26 through pag 9, line 9 as follows:

The CSMA/CA method, which is the basic access method according to the IEEE 802.11 standard avoids ~~collusions~~ collisions by the use of a priority scheme according to which access rights of respective stations are signaled. In case a station is ready to send, the station listens to the transmission media, i.e. to the radio path and if the path is free, it

sends a transmission request. Details with respect to the CSMA/CA are described in the IEEE 802.11 standard, which is hereby incorporated by reference. Due to the CSMA/CA method, the appearance of ~~collusions~~ collisions may be reduced, however, it cannot be completely avoided.

Due to this, the sign-off of the bridge terminal from the remaining stations in the actual subnet cannot always be performed without ~~collusions~~ collisions. A preferable way to signal or broadcast the sign-off is the normal data transmission sequence, including RTS/CTS (ready to send/clear to send) from the bridge terminal to other stations or from other stations to the bridge terminal. This data exchange is protected by the NAV and furthermore includes a confirmation for the received signaling of the following doze mode.

Please amend the paragraph beginning at page 9, line 22 as follows:

Such broadcast transmission is a simple and effective way to reach all stations within one subnet, i.e. within one independent basic service set (IBSS). However, a disadvantage of the broadcast appears when there are ~~collusions~~ collisions. There is no confirmation for a broadcast message according to the IEEE 802.11 standard. Due to this, there is no control for the successful delivery of the broadcast message to all of the remaining stations. According to an aspect of the present invention, this can be solved by successively transmitting a plurality of broadcast frames. Thus, for example, the frames 52 and 54 may be broadcast frames with the power management bit. However, even the transmission of a plurality of broadcasts does not allow the confirmation of the successful reception of the broadcasts by all of the terminals within the subnet.

Please amend the paragraph beginning at page 10, line 31 as follows:

The ATIM window and the synchronization is important for the bridge terminal. Since the bridge terminal constantly changes between two or even more subnets, the bridge terminal has to be synchronized in those subnets and has to send acknowledgment messages ACK for each ATIM in each of both subnets. The missing of such an acknowledgment message ACK may have two reasons. The first reason is that the sent

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ATIM message was not received due to a ~~collusions~~ collisions. The second reason may be that due to a missed synchronization, the receiving station is in the doze mode.